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| 1  | WE CLAIM:  |   |  |
|----|--|---|--|
| 2  | 1.   | A method of facilitating delivery of advertising to users of mobile |  |
| 3  | computing platforms comprising the steps of:   |   |  |
| 4  | defining advertising zones within a geographic region; and                                   |   |  |
| 5  | in a geographic database that contains data that represent roads located in the              |   |  |
| 6  | geographic region, associating with each data entity that represents a road segment          |   |  |
| 7  | located in the geographic region data that indicate in which of said advertising zones the   |   |  |
| 8  | road segment represented by the data entity is located.                                      |   |  |
| 9  |  |   |  |
| 10 | 2.   | The method of Claim 1 further comprising:                           |  |
| 11 | definin  | g a hierarchy of said advertising zones, wherein said hierarchy of  |  |
| 12 | advertising zones includes at least a first layer and a second layer, and further wherein at |   |  |
| 13 | least some of the advertising zones in said first layer overlap some of the advertising      |   |  |
| 14 | zones in said s  | second layer.   |  |
| 15 |  |   |  |
| 16 | 3.   | The method of Claim 2 further comprising:                           |  |
| 17 | defining an index that references each of the advertising zones in the first layer           |   |  |
| 18 | that overlap each of the advertising zones in the second layer.                              |   |  |
| 19 |  |   |  |
| 20 | 4.   | The method of Claim 1 further comprising:                           |  |
| 21 | associating advertising messages with at least some of said advertising zones.               |   |  |
| 22 |  |   |  |
| 23 | 5.   | The method of Claim 4 further comprising:                           |  |
| 24 | storing said advertising messages in an advertising database.                                |   |  |
| 25 |  |   |  |
| 26 | 6.   | The method of Claim 1 wherein said advertising zones are formed     |  |
| 27 | dynamically.   |   |  |

| 1  | 7.   | A method of facilitating delivery of advertising to users of geographic data |  |
|----|--|--|--|
| 2  | comprising the steps of:   |  |  |
| 3  | defining a hierarchy of advertising areas located within a geographic region,              |  |  |
| 4  | wherein said hierarchy of advertising areas include at least a first layer and a second    |  |  |
| 5  | layer, wherein said first layer and said second layer overlap; and                         |  |  |
| 6  | in a geographic database that contains data that represent roads located in the            |  |  |
| 7  | geographic region, associating with each data entity that represents a road segment        |  |  |
| 8  | located in the geographic region data that indicate in which of said advertising areas the |  |  |
| 9  | road segment represented by the data entity is located.                                    |  |  |
| 10 |  |  |  |
| 11 | 8.   | The method of Claim 7 further comprising:                                    |  |
| 12 | defining an index that references the advertising zones in the first layer that            |  |  |
| 13 | overlap the advertising zones in the second layer.   |  |  |
| 14 |  |  |  |
| 15 | 9.   | The method of Claim 7 wherein said advertising zones are based on            |  |
| 16 | accessibility  |  |  |
| 17 |  |  |  |
| 18 | 10.  | The method of Claim 7 wherein said advertising zones are based driving       |  |
| 19 | distances from defined locations.  |  |  |
| 20 |  |  |  |
| 21 | 11.  | The method of Claim 7 wherein said advertising zones are based driving       |  |
| 22 | times from defined locations.  |  |  |
| 23 |  |  |  |
| 24 | 12.  | The method of Claim 7 wherein said advertising zones are formed              |  |
| 25 | dynamically  | •  |  |
| 26 |  | 4.11.  |  |
| 27 | 13.  | A geographic database stored on a computer-readable medium                   |  |
| 28 | comprising:  |  |  |
| 29 | road segment data that represent road segments located in a geographic region;             |  |  |
| 30 | and  |  |  |

| 1  | advertising zone data associated with said road segment data, wherein said                  |   |  |  |
|----|---|---|--|--|
| 2  | advertising zo  | advertising zone data indicate which of a plurality of advertising zones into which the |  |  |
| 3  | geographic re   | geographic region is divided road segments represented said road segment data are       |  |  |
| 4  | located in.   |   |  |  |
| 5  |   |   |  |  |
| 6  | 14.   | The invention of Claim 13 wherein said geographic database further                      |  |  |
| 7  | comprises:  |   |  |  |
| 8  | an index that references advertising zones that encompass other advertising zones.          |   |  |  |
| 9  |   |   |  |  |
| 10 | 15.   | The invention of Claim 13 wherein said geographic database is installed in              |  |  |
| 11 | a standalone navigation system.   |   |  |  |
| 12 |   |   |  |  |
| 13 | 16.   | The invention of Claim 13 wherein said geographic database is installed                 |  |  |
| 14 | on a navigation services server from which end users' computing platforms obtain            |   |  |  |
| 15 | geographically-related services.  |   |  |  |
| 16 |   |   |  |  |
| 17 | 17.   | The invention of Claim 13 wherein said advertising zone data includes an                |  |  |
| 18 | indication of which of a plurality of layers of advertising zones, a particular advertising |   |  |  |
| 19 | zone is located in.   |   |  |  |
| 20 |   |   |  |  |
| 21 | 18.   | A method of delivering advertising to users of mobile computing                         |  |  |
| 22 | platforms tha   | at provide navigation-related services comprising:                                      |  |  |
| 23 | deter   | determining a position of a mobile computing platform as the mobile computing           |  |  |
| 24 | platform travels in a geographic region;  |   |  |  |
| 25 | deten   | determining in which of a plurality of advertising zones into which the geograph        |  |  |
| 26 | region is div   | region is divided the user is located; and  |  |  |
| 27 | provi   | ding the user with an advertising message associated with said advertising              |  |  |
| 28 | zone.   |   |  |  |
| 29 |   |   |  |  |

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| 1  | 19.  | The method of Claim 18 wherein said advertising messages are provided          |  |  |
|----|--|--|--|--|
| 2  |  | ss communications link to the mobile computing platform from a navigation      |  |  |
| 3  | services serve   |  |  |  |
| 4  |  |  |  |  |
| 5  | 20.  | A method of providing advertising to users of mobile computing platforms       |  |  |
| 6  | that are move  | d through a geographic region comprising:                                      |  |  |
| 7  | defining advertising areas within the geographic region;                               |  |  |  |
| 8  | associating advertising messages with said advertising areas;                          |  |  |  |
| 9  | with respect to each of said mobile computing platforms, determining a current         |  |  |  |
| 10 | position of the mobile computing platform as said mobile computing platform is moved   |  |  |  |
| 11 | through the geographic region;   |  |  |  |
| 12 | determining in which of said advertising areas the mobile computing platform is        |  |  |  |
| 13 | located; and   |  |  |  |
| 14 | delivering to the mobile computing platform an advertising message associated          |  |  |  |
| 15 | with the advertising area in which the mobile computing platform is located.           |  |  |  |
| 16 |  |  |  |  |
| 17 | 21.  | The method of Claim 20 further comprising:                                     |  |  |
| 18 | after  | the step of determining in which of said advertising areas the mobile          |  |  |
| 19 | computing platform is located, determining the advertising message associated with the |  |  |  |
| 20 | advertising a  | rea.   |  |  |
| 21 |  |  |  |  |
| 22 | 22.  | The method of Claim 21 further comprising:                                     |  |  |
| 23 | after  | the step of delivering, providing the advertising message via a user interface |  |  |
| 24 | of the mobile computing platform.  |  |  |  |
| 25 |  |  |  |  |
| 26 | 23.  | The method of Claim 21 further comprising:                                     |  |  |
| 27 | after  | the step of delivering, providing the advertising message audibly via the      |  |  |
| 28 | mobile computing platform.   |  |  |  |

| 1  | 24.  | The method of Claim 21 further comprising:                                 |  |  |
|----|--|--|--|--|
| 2  | after t  | he step of delivering, providing the advertising message visually via the  |  |  |
| 3  | mobile comp  | mobile computing platform.   |  |  |
| 4  |  |  |  |  |
| 5  | 25.  | A method of delivering location-based warnings to users of computing       |  |  |
| 6  | platforms tha  | t provide navigation-related services comprising:                          |  |  |
| 7  | determining a position of a mobile computing platform as the mobile computing    |  |  |  |
| 8  | platform travels in a geographic region;   |  |  |  |
| 9  | determining in which of a plurality of zones into which the geographic region is |  |  |  |
| 10 | divided the mobile computing platform is located; and                            |  |  |  |
| 11 | providing a user of the mobile computing platform with a warning message         |  |  |  |
| 12 | associated with said zone.   |  |  |  |
| 13 |  |  |  |  |
| 14 | 26.  | The method of Claim 25 wherein said warning message relates to an          |  |  |
| 15 | adverse weather condition.   |  |  |  |
| 16 |  |  |  |  |
| 17 | 27.  | The method of Claim 25 wherein said warning message relates to traffic     |  |  |
| 18 | conditions in  | the zone.  |  |  |
| 19 |  |  |  |  |
| 20 | 28.  | A method of delivering advertising to users of mobile computing            |  |  |
| 21 | platforms that provide navigation-related services comprising:                   |  |  |  |
| 22 | determining a position of a mobile computing platform as the mobile computing    |  |  |  |
| 23 | platform travels in a geographic region;   |  |  |  |
| 24 | dynamically forming an advertising zone associated with the position of the      |  |  |  |
| 25 | mobile computing platform; and   |  |  |  |
| 26 | provi  | ding the user with an advertising message associated with said advertising |  |  |
| 27 | zone.  |  |  |  |
| 28 | *  |  |  |  |
| 29 |  |  |  |  |
| 30 |  |  |  |  |